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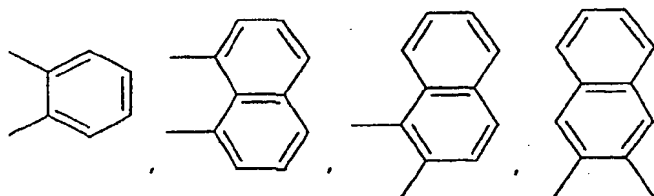
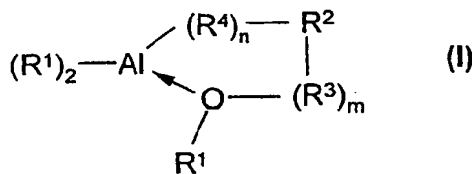
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(54) Title: OXYGEN-CONTAINING ORGANOALUMINIUM COMPLEXES AS COCATALYSTS



**(S7) Abstract:** The present invention relates to novel oxygen-containing organoaluminium complexes of the general formula (I) in which R<sup>1</sup>, independently of one another, denote branched or unbranched C<sub>1</sub>-C<sub>7</sub>-alkyl, -cycloalkyl, -alkenyl, -cycloalkenyl, -aryl or -alkynyl; R<sup>2</sup> denotes unsubstituted, mono- or polyalkylated and/or mono- or polyfluorinated aromatic hydrocarbons from the group R<sup>3</sup>, R<sup>4</sup>, independently of one another, denote CH<sub>3</sub>, CF<sub>3</sub> or C(R<sup>1</sup>)<sub>2</sub>; independently of one another, m denotes 0, 1, 2 n denotes 0, 1, 2. These compounds can serve as cocatalysts in olefinic polymerisation reactions. In particular, they can be employed for the preparation of novel Ziegler-Natta catalysts having improved properties, in particular having higher activities compared with conventional Ziegler-Natta catalysts with AlEt<sub>3</sub>, as cocatalyst, or of novel coordination catalyst systems which have higher activities than conventional Ziegler-Natta catalysts, even at low temperatures, such as 60°C, and a pressure of 2 bar.